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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,378	03/19/2004	Weijian Wen	65765-0034	7239

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BLOOMFIELD HILLS, MI 48304-0610

EXAMINER

BISSETT, MELANIE D

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/804,378

Applicant(s)

WEN ET AL.

Examiner

Melanie D. Bissett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda in view of Fisher et al.

3. Takeda discloses a PSA composition comprising a random copolymer of isobutylene and paramethylstyrene and a tackifier (abstract). Preferably, the isobutylene copolymer is halogenated [0017]. Amine crosslinking agents are used to improve cohesion [0019]. Tackifiers and plasticizers are both used [0020-0021]. However, the reference does not teach the use of fillers and reinforcing fillers and also does not teach the use of the polybutene tackifier, a release liner, or an antioxidant. Fisher teaches adhesives for tapes comprising a rubber component, a thermoplastic polymer, a plasticizer, and an organic filler applied to a release liner (abstract). Calcium carbonate and other inorganic and organic fillers are employed to improve the vibration damping properties of the adhesive [0018-0019; 0025]. Reinforcing fillers including precipitated silica are added for their art-recognized purpose of reinforcing the adhesive [0031]. Thus, it would have been prima facie obvious to add the fillers employed by Fisher in Takeda's invention to improve reinforcing and vibration damping properties of the adhesives.

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4. Fisher teaches polybutene plasticizers are imparting improved softness and initial adhesion to the composition [0009; 0024]. Thus, it would have been prima facie obvious to use polybutene plasticizers in the Takeda invention to improve softness and initial adhesion. A release liner is employed for its art-recognized purpose of protecting the exposed adhesive surface [0013-0014]. Thus, it would have been prima facie obvious to apply the adhesives to a release liner to protect the exposed adhesive surface. Also, Fisher teaches using antioxidants for the art-recognized purpose of improving weathering properties of the adhesive. Thus, it is the examiner's position that it would have been prima facie obvious to use anti-oxidants in the adhesives of Takeda's invention to improve the weathering properties of the adhesives.

5. Claims 1-3, 5-9, 11-13, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher et al. in view of Takeda.

6. Fisher discloses adhesive tapes comprising compositions of rubber polymer, thermoplastic polymer, plasticizer, and organic filler applied to a release liner (abstract). The rubber component composes 5-10% by weight of the composition, the polybutene plasticizer composes 15-30% by weight of the composition [0011], inorganic fillers like calcium carbonate compose up to 60% by weight of the composition [0025], reinforcing fillers including precipitated silica compose 1-3% by weight of the composition [0031], and antioxidants compose 0.1-1% by weight of the composition [0034]. Examples show the combination of rubber, antioxidant, organic fillers, inorganic fillers, and polybutene plasticizers. Although the examples do not specify the use of calcium carbonate and

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precipitated silica together, it is the examiner's position that it would have been prima facie obvious to choose those materials from the few types listed to provide equally improved weathering and vibration damping properties.

7. Although the reference teaches the use of polyisobutylene rubber, the reference does not teach the claimed halogenated copolymer and an amine curing agent. Takeda teaches adhesives comprising halogenated copolymers of isobutylene and paramethylstyrene, where amine curing agents are used to improve cohesion [0019]. The specific copolymers are chosen because of their improved adhesion, heat resistance, strength, and flexibility [0017-0018]. It is the examiner's position that it would have been prima facie obvious to use the copolymers and curing agents of the Takeda reference in Fisher's adhesives in any amount necessary to optimize the adhesion, cohesion, heat resistance, strength, and flexibility of the adhesives.

8. Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda in view of Hani et al.

9. Takeda applies as above, teaching adhesives but failing to teach the addition of antimicrobial agents. Antimicrobial additives are conventionally added to adhesives, sealants, rubber materials, and coatings to inhibit growth of microorganisms in household products (Hani, abstract, col. 3 lines 6-15). Thus, it would have been prima facie obvious to include antimicrobial additives in the inventive adhesives to inhibit growth of microorganisms.

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10. Claims 4, 10, 14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher et al. in view of Takeda as applied above, and further in view of Hani et al.

11. Fisher and Takeda apply as above, teaching adhesives but failing to teach the addition of antimicrobial agents. Antimicrobial additives are conventionally added to adhesives, sealants, rubber materials, and coatings to inhibit growth of microorganisms in household products (Hani, abstract, col. 3 lines 6-15). Thus, it would have been prima facie obvious to include antimicrobial additives in the inventive adhesives to inhibit growth of microorganisms.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Melanie D. Bissett  
Patent Examiner  
Art Unit 1711

mdb